

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
10 March 2005 (10.03.2005)

PCT

(10) International Publication Number
WO 2005/020788 A2

(51) International Patent Classification⁷: **A61B**
(21) International Application Number:
PCT/US2004/025146
(22) International Filing Date: 2 August 2004 (02.08.2004)
(25) Filing Language: English
(26) Publication Language: English
(30) Priority Data:
60/492,053 1 August 2003 (01.08.2003) US

(71) Applicant (for all designated States except US): **THE GENERAL HOSPITAL CORPORATION** [US/US]; 55 Fruit Street, Boston, MA 02114 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BREITER, Hans, C.** [US/US]; Hobbs Brook Farm, 268 Cambridge Turnpike, Lincoln, MA 01773 (US). **GASIC, Gregory** [US/US]; 52 Standish Circle, Wellesley, MA (US).

(74) Agent: **TABTIANG, Ramon, K.**; Fish & Richardson P.C., 225 Franklin Street, Boston, MA 02110-2804 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

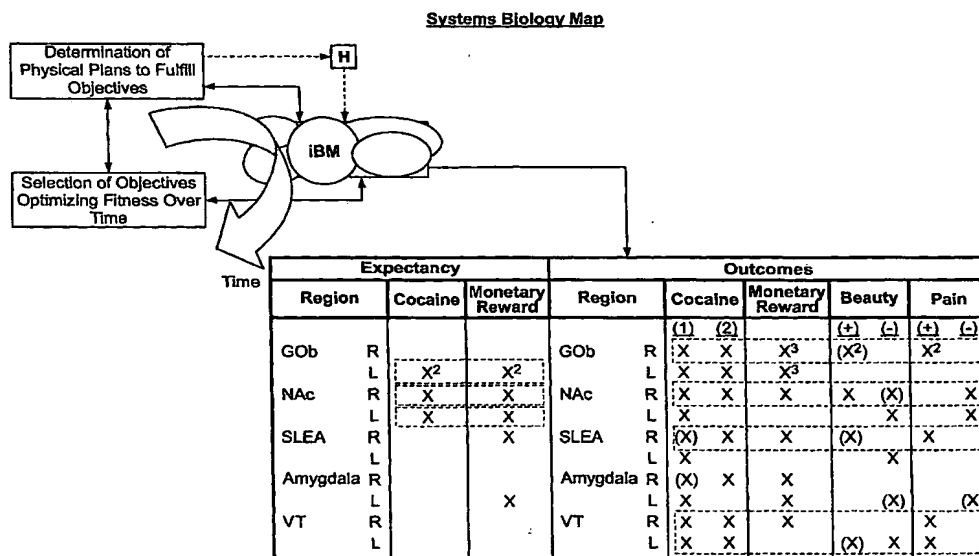
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **COGNITION ANALYSIS**



(57) Abstract: Methods for evaluating information about the structure and function of neural circuits in the brain can be used for diagnosis and gene identification. Exemplary methods and data management features consolidate relationships within multi-dimensional complex data sets, e.g., data sets that include systems biology measures, such as those obtained from neuroimaging, and, optionally also genetic measures, e.g., from the same individuals.